



The CAHPS® Child Hospital Survey Database 2023 Chartbook

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1. Overview of Results



2023 Child Hospital Survey Database



The 2023 Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Child Hospital Survey Database includes 8,107 survey responses voluntarily submitted by 35 hospitals.



High Scoring Measures



Communication Between You and Your Child's Doctors

86%

of respondents reported that doctors always listened carefully, explained things clearly, and treated parents with courtesy and respect.



Privacy When Talking with Doctors, Nurses, and Other Providers

85%

of respondents reported they always had privacy when discussing their child's care with doctors, nurses, and other providers.

Low Scoring Measures



Preventing Mistakes and Helping You Report Concerns

61%

of respondents reported providers always checked their child's identity before giving medicines and told them how to report mistakes.



Quietness of Hospital Room

64%

of respondents reported that the area around their child's hospital room was always quiet at night.

2. Introduction

The Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Child Hospital (Child HCAHPS) Survey Database receives data voluntarily submitted by participating children’s hospitals and inpatient pediatric departments that administered the Child HCAHPS Survey. This Chartbook presents summary results for the 2023 Child HCAHPS Survey Database, which received data from 35 hospitals that collected Child HCAHPS Survey data in 2022.

About the Child HCAHPS Survey

The Child HCAHPS Survey assesses the inpatient care experiences of pediatric patients (17 and younger) and their parents or guardians, who serve as survey respondents. The survey focuses on aspects of pediatric inpatient care that are important to patients and their parents, and for which patients and their parents are generally the best source of information. Hospitals, insurers, and policy makers can use the survey results for quality improvement initiatives.

About the Child HCAHPS Survey Chartbook

The purpose of this Chartbook is to provide comparative information to users of the Child HCAHPS Survey to help assess their own performance and to identify areas of strength as well as opportunities for improvement. The Chartbook presents aggregated, summary level results of the Child HCAHPS Survey composite measures, and individual survey items including the overall rating and willingness to recommend items. All results are calculated at the respondent level. No individual hospital results are presented.

Questions or comments regarding this Chartbook or the Child HCAHPS Survey Database may be directed to the CAHPS Databases by email at CAHPSDatabase@westat.com or the toll-free help line at 888-808-7108.

Hospital Characteristics and Response Modes

Table 1 presents the distribution of respondents by hospital type. The table displays the number of hospitals, number of respondents, and percent of respondents for each hospital type.

Hospital Type	Number of Hospitals	Number of Respondents	Percent of Respondents
Free-standing children’s hospital	7	5,534	68%
Children’s hospital within a hospital	4	1,085	13%
Pediatric service unit(s) within a hospital	24	1,488	18%
Total	35	8,107	100%

Note: Percentages may not add up to 100 percent due to rounding.

Table 2 presents the distribution of hospitals and respondents by region. The table displays the number of hospitals, number of respondents, and percent of respondents for each region.

Region	Number of Hospitals	Number of Respondents	Percent of Respondents
Northeast	6	2,396	30%
Mid-West	0	0	0%
South	4	3,656	45%
West	25	2,055	25%
Total	35	8,107	100%

Definitions of regions are:

Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Puerto Rico, Rhode Island, Vermont;

Mid-West: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin;

South: Alabama, Arkansas, Delaware, DC, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia;

West: Alaska, Arizona, California, Colorado, Guam, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

Table 3 presents the distribution of respondents by response mode. The table displays the number of respondents and percent of respondents for each response mode.

Response Mode	Number of Respondents	Percent of Respondents
Mail	1,687	21%
Telephone	3,054	38%
Web	3,366	42%
Total	8,107	100%

Note: Percentages may not add up to 100 percent due to rounding.

Summary of 2023 Child HCAHPS Survey Top Box Scores

Table 4 presents the top box scores (most positive survey response option) for the composite measures, rating, willingness to recommend, and single item measures included in the 2023 Child HCAHPS Survey Database. The highest scoring measure was *Communication Between You and Your Child’s Doctors* (86 percent), followed by *Privacy When Talking With Doctors, Nurses, and Other Providers* (85 percent). The lowest scoring measures were *Preventing Mistakes and Helping You Report Concerns* (61 percent), and *Quietness of Hospital Room* (64 percent).

Table 4. 2023 Child HCAHPS Survey Database Top Box Scores	
Survey Measure	Child HCAHPS Database Overall
Number of Hospitals	35
Number of Respondents	8,107
Topic: Communication with Parent	
Communication Between You and Your Child’s Nurses	84%
Communication Between You and Your Child’s Doctors	86%
Communication About Your Child’s Medicines	80%
Keeping You Informed About Your Child’s Care	76%
Preparing You and Your Child to Leave the Hospital	84%
Privacy When Talking With Doctors, Nurses, and Other Providers (single-item)	85%
Keeping You Informed About Your Child’s Care in the ER (single-item)	82%
Topic: Communication with Child	
How Well Nurses Communicate With Your Child	77%
How Well Doctors Communicate With Your Child	76%
Involving Teens in Their Care	73%
Topic: Attention to Safety and Comfort	
Preventing Mistakes and Helping You Report Concerns	61%
Helping Your Child Feel Comfortable	69%
Responsiveness to the Call Button (single item)	67%
Paying Attention to Your Child’s Pain (single item)	78%
Topic: Hospital Environment	
Cleanliness of Hospital Room (single item)	70%
Quietness of Hospital Room (single item)	64%
Global Ratings	
Overall Rating of Hospital	76%
Willingness to Recommend the Hospital	83%

3. Data Sources and Limitations

Data Sources

The data presented in this Chartbook were compiled from 8,107 survey respondents voluntarily submitted to the Child HCAHPS Survey Database by 35 children’s hospitals and inpatient pediatric departments. The Child HCAHPS survey was administered between January–December 2022.

Data Limitations







The 35 submitting hospitals represent a mix of regions, hospital types, and other characteristics. Because the hospitals that voluntarily contribute data to the CAHPS Database are not from a statistically representative sample of all U.S. children’s hospitals or inpatient pediatric departments. That is, a limited number of hospitals chose to participate. Consequently, the submitting hospitals are not necessarily representative of all U.S. children’s hospitals and inpatient pediatric departments. Estimates based on these voluntarily submitted data sets may produce biased estimates of the overall inpatient pediatric care patient experience in the U.S.

4. Results

This section presents a summary of results for the 8,107 respondents in the 2023 Child HCAHPS Survey Database. The results are organized by the topic areas assessed in the survey: (1) Communication with Parent; (2) Communication with Child; (3) Attention to Safety and Comfort; (4) Hospital Environment; and (5) Global Rating measures. Within each topic area, the results are shown by composite measure, the items that make up the composite measure, and the single-item measures. The results are presented in a set of bar charts showing the distribution of scores for each response category. The top box scores represent the most positive response option(s), while the bottom box represents the most negative response option(s). The bar charts are followed by breakout tables showing top box scores by length of stay, and the child’s age. The far right column (N) denotes the number of respondents. Note, the number of respondents to specific questions may be less than the total number of respondents for multiple reasons. Possible reasons include non-response producing missing data, some questions only being applicable to subpopulations (e.g., Involving Teens in Their Care), and skip patterns.

Appendix A presents respondent and child demographic characteristics. Appendix B presents the definition of composite measures, items, and ratings. Appendix C presents detailed information regarding how results are calculated.

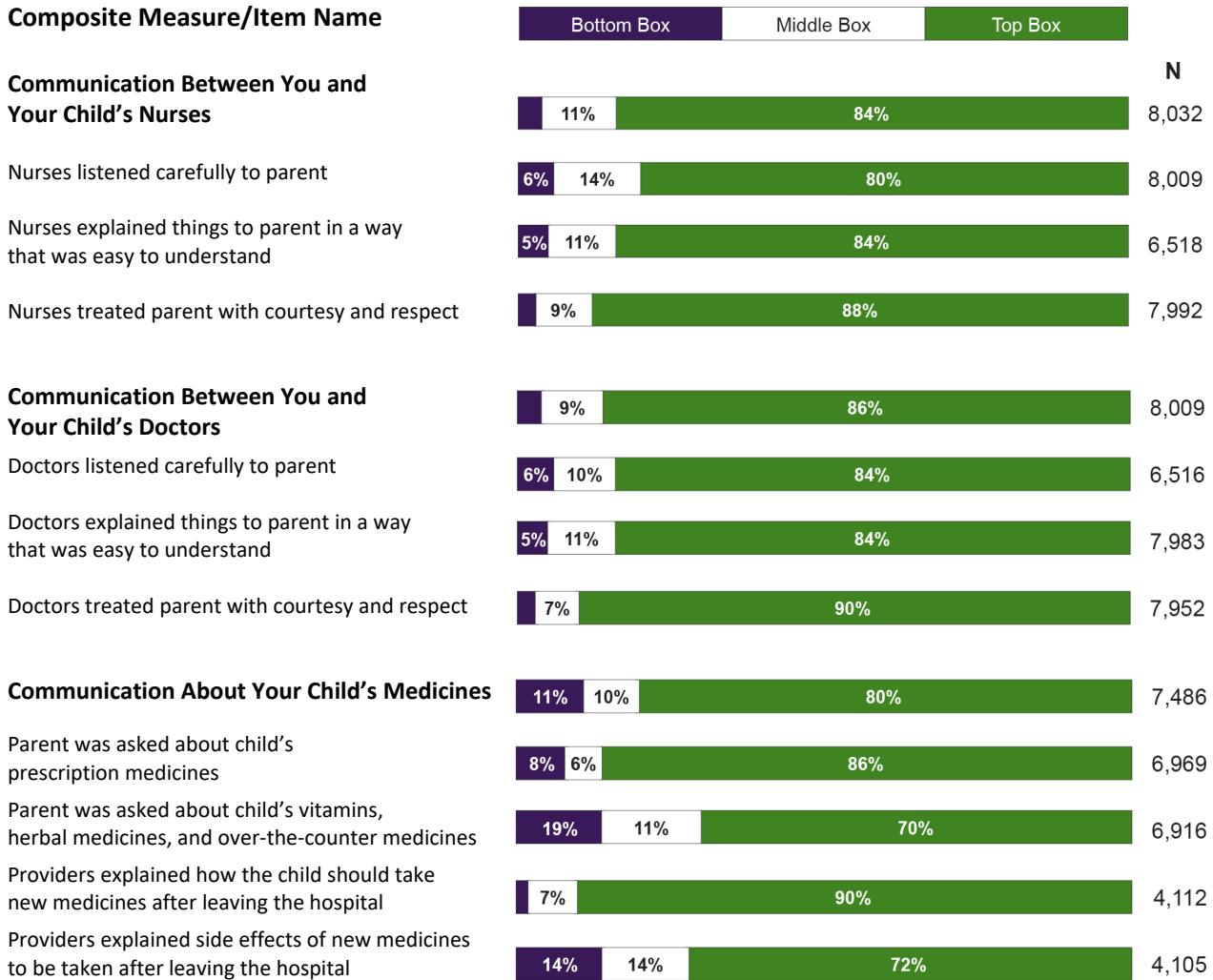
Highlights of Respondent Characteristics

Child Characteristics	Respondent Characteristics
 <p>47% were female</p>	 <p>87% were the mother of the child</p>
 <p>28% were less than one year old</p>	 <p>42% were between the ages of 35-44</p>
 <p>70% were in Very Good or Excellent health, as reported by respondents</p>	 <p>56% had a four-year college degree or more</p>

2023 Child HCAHPS Results

Chart 4-1. Composite Measure Item Results—2023 Child HCAHPS Survey Database (Page 1 of 4)

Communication with Parent Measures

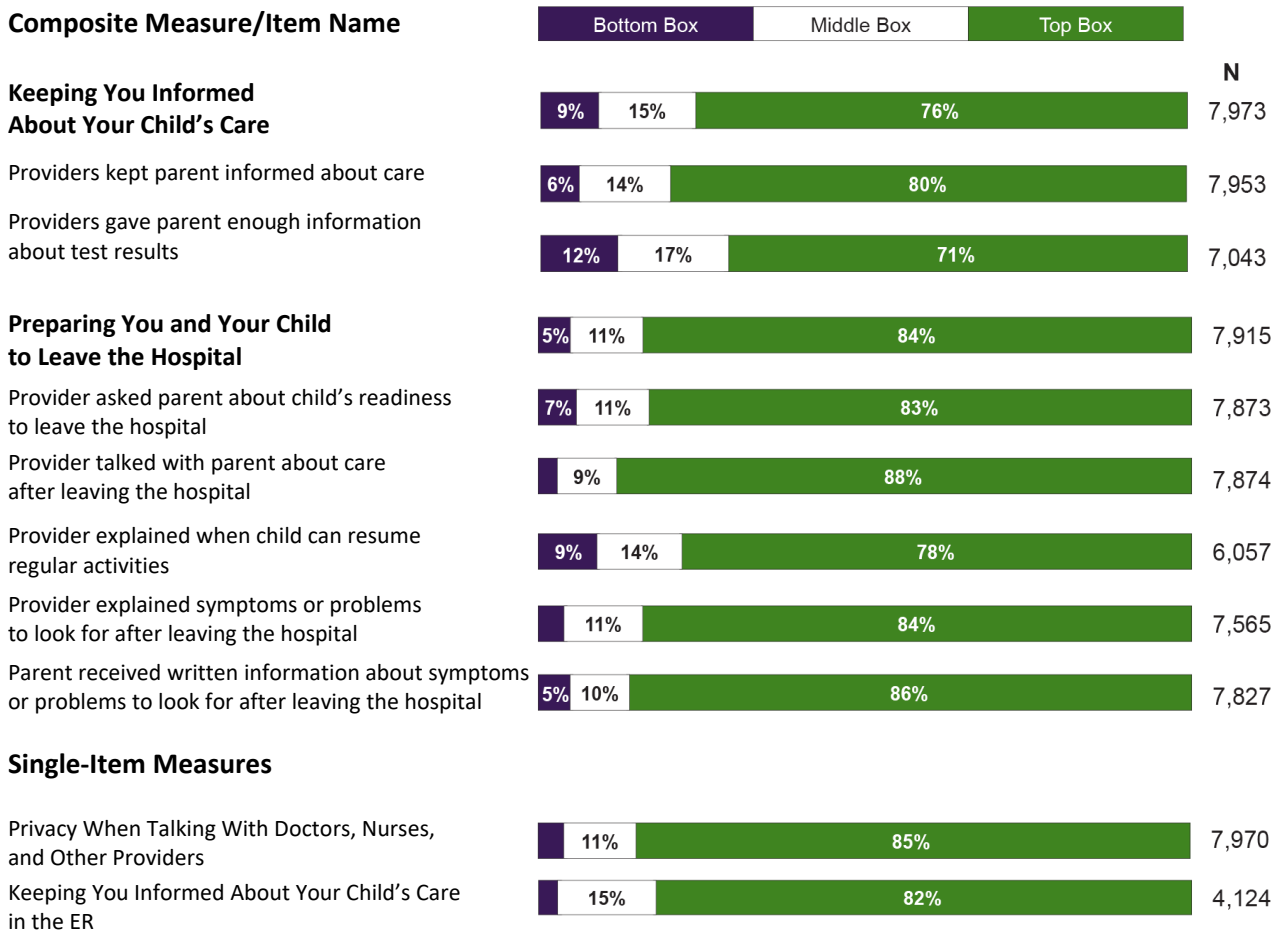


Note: Percentages less than 5% are not shown in the bar charts. See Appendix B for the definition of composite measures, individual items, and ratings, including the response scale used for each. See Appendix C for information on how the results are calculated.

2023 Child HCAHPS Results

Chart 4-1. Composite Measure Item Results—2023 Child HCAHPS Survey Database (Page 2 of 4)

Communication with Parent Measures (continued)

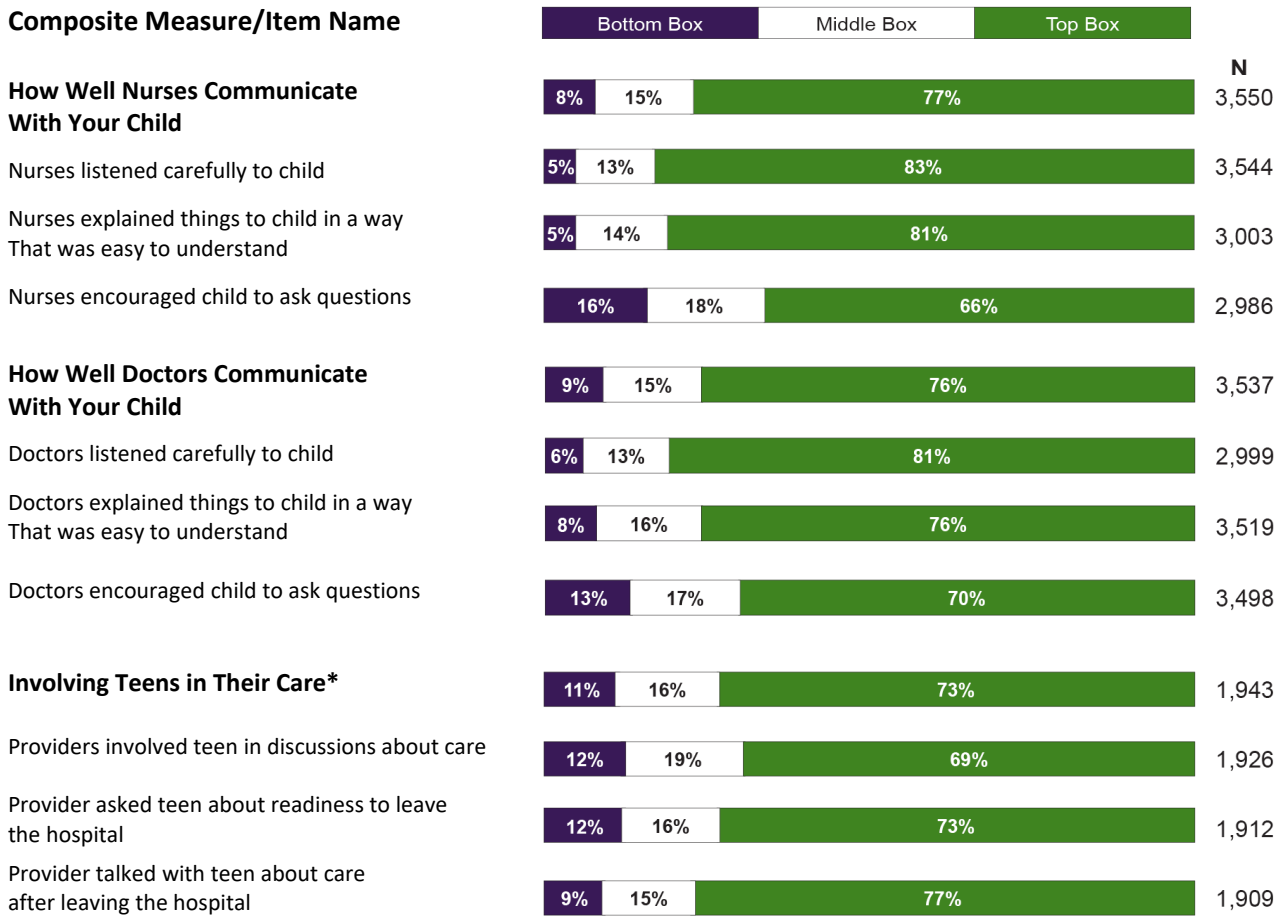


Note: Percentages less than 5% are not shown in the bar charts. See Appendix B for the definition of composite measures, individual items, and ratings, including the response scale used for each. See Appendix C for information on how the results are calculated.

2023 Child HCAHPS Results

Chart 4-1. Composite Measure Item Results—2023 Child HCAHPS Survey Database (Page 3 of 4)

Communication with Child Measures



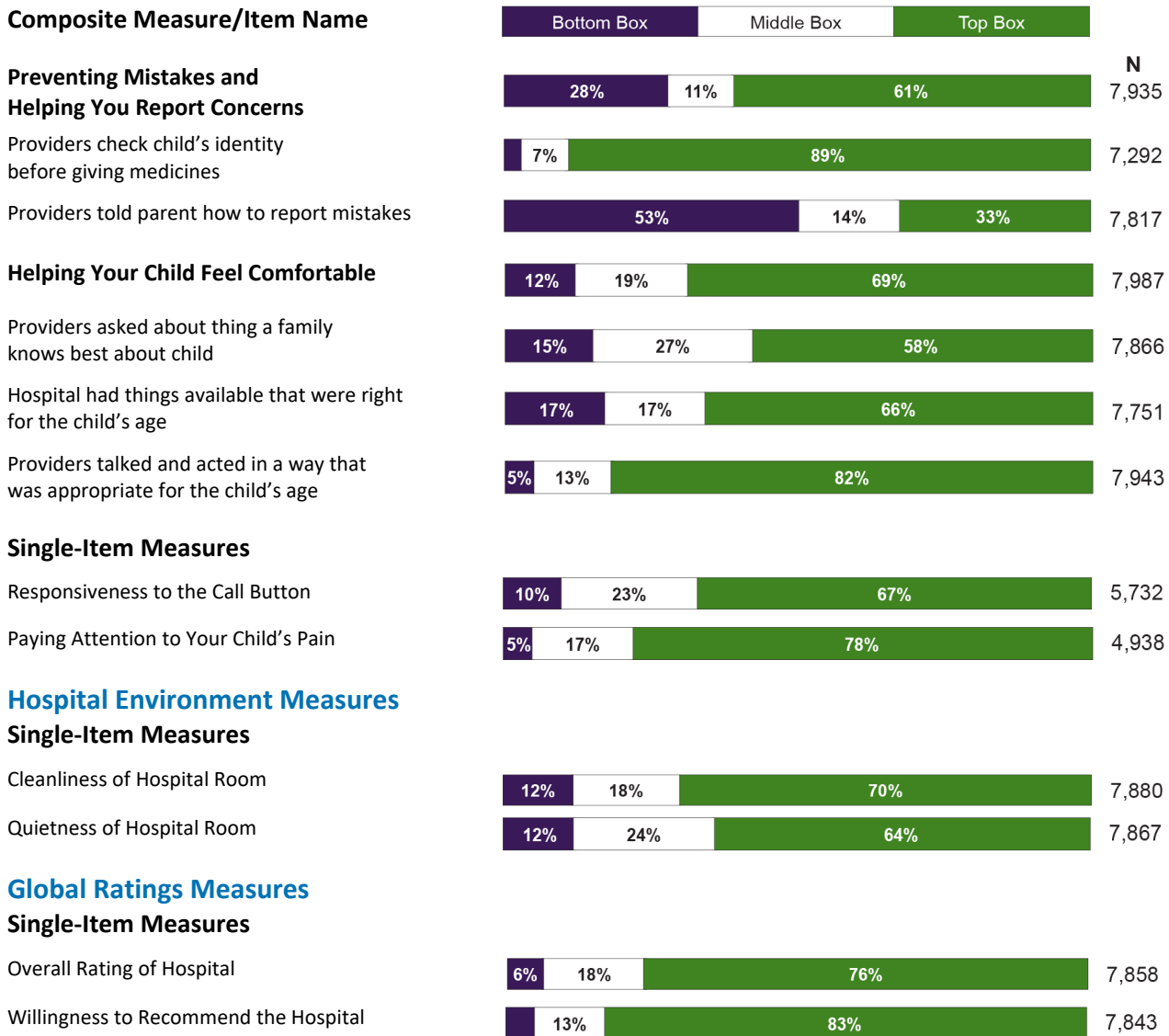
Note: Percentages less than 5% are not shown in the bar charts. See Appendix B for the definition of composite measures, individual items, and ratings, including the response scale used for each. See Appendix C for information on how the results are calculated.

**Involving Teens in Their Care* questions were only answered by respondents with children thirteen years of age or older.

2023 Child HCAHPS Results

Chart 4-1. Composite Measure Item Results—2023 Child HCAHPS Survey Database (Page 4 of 4)

Attention to Safety and Comfort Measures



Note: Percentages less than 5% are not shown in the bar charts. See Appendix B for the definition of composite measures, individual items, and ratings, including the response scale used for each. See Appendix C for information on how the results are calculated.

2023 Child HCAHPS Results

Table 5 displays top box scores by length of stay. For the majority of measures, a longer length of stay is associated with lower top box scores. The largest difference in scores is for *Quietness of Hospital Room*, ranging from 68 percent for a stay of up to 3 days in the hospital to 49 percent with a stay of 10 or more days.

Table 5. Top Box Scores by Length of Stay					
Composite Name/Single Item Measure	0 to 1 Day	2 to 3 Days	4 to 9 Days	10 or More Days	Child HCAHPS Database Overall
Number of Respondents	1,605	3,277	2,133	1,092	8,107
Topic: Communication with Parent					
Communication Between You and Your Child’s Nurses	86%	86%	83%	79%	84%
Communication Between You and Your Child’s Doctors	88%	87%	86%	82%	86%
Communication About Your Child’s Medicines	80%	80%	80%	78%	80%
Keeping You Informed About Your Child’s Care	78%	77%	74%	71%	76%
Preparing You and Your Child to Leave the Hospital	84%	84%	84%	81%	84%
Privacy When Talking With Doctors, Nurses, and Other Providers (single-item)	85%	87%	85%	80%	85%
Keeping You Informed About Your Child’s Care in the ER (single-item)	84%	82%	82%	84%	82%
Topic: Communication with Child					
How Well Nurses Communicate With Your Child	78%	79%	74%	71%	77%
How Well Doctors Communicate With Your Child	77%	78%	73%	73%	76%
Involving Teens in Their Care	76%	74%	71%	69%	73%
Topic: Attention to Safety and Comfort					
Preventing Mistakes and Helping You Report Concerns	58%	62%	62%	60%	61%
Helping Your Child Feel Comfortable	66%	69%	70%	70%	69%
Responsiveness to the Call Button (single item)	72%	69%	63%	61%	67%
Paying Attention to Your Child’s Pain (single item)	76%	80%	79%	76%	78%
Topic: Hospital Environment					
Cleanliness of Hospital Room	73%	70%	68%	70%	70%
Quietness of Hospital Room	68%	68%	62%	49%	64%
Global Ratings					
Overall Rating of Hospital	75%	76%	76%	75%	76%
Willingness to Recommend the Hospital	83%	83%	83%	81%	83%

Note: N/A displayed for measures with fewer than 100 respondents.

Table 6 displays top box scores by the child’s age. In general, scores tended to be higher for respondents with children over one year. The largest difference in scores is for *How Well Doctors Communicate With Your Child*, ranging from 66 percent for children aged 1-3 years to 79 percent for children aged 13 and older.

Table 6. Top Box Scores by Child’s Age*						
Composite Name/Single Item Measure	Under 1 year	1 to 3 years	4 to 6 years	7 to 12 years	13 years or Older	Child HCAHPS Database Overall
Number of Respondents	2,160	1,500	842	1,322	1,987	8,107
Topic: Communication with Parent						
Communication Between You and Your Child’s Nurses	82%	83%	85%	86%	86%	84%
Communication Between You and Your Child’s Doctors	85%	85%	87%	88%	86%	86%
Communication About Your Child’s Medicines	75%	80%	80%	81%	81%	80%
Keeping You Informed About Your Child’s Care	75%	75%	78%	77%	75%	76%
Preparing You and Your Child to Leave the Hospital	83%	85%	85%	85%	82%	84%
Privacy When Talking With Doctors, Nurses, and Other Providers (single-item)	85%	88%	86%	85%	82%	85%
Keeping You Informed About Your Child’s Care in the ER (single-item)	82%	82%	83%	83%	82%	82%
Topic: Communication with Child						
How Well Nurses Communicate With Your Child	N/A	69%	71%	76%	79%	77%
How Well Doctors Communicate With Your Child	N/A	66%	70%	73%	79%	76%
Involving Teens in Their Care	N/A	N/A	N/A	N/A	73%	73%
Topic: Attention to Safety and Comfort						
Preventing Mistakes and Helping You Report Concerns	58%	61%	63%	63%	62%	61%
Helping Your Child Feel Comfortable	65%	72%	73%	72%	66%	69%
Responsiveness to the Call Button (single item)	68%	67%	72%	67%	66%	67%
Paying Attention to Your Child’s Pain (single item)	69%	72%	79%	86%	83%	78%
Topic: Hospital Environment						
Cleanliness of Hospital Room	73%	67%	71%	69%	69%	70%
Quietness of Hospital Room	63%	67%	69%	64%	61%	64%
Global Ratings						
Overall Rating of Hospital	73%	73%	77%	78%	78%	76%
Willingness to Recommend the Hospital	80%	82%	83%	85%	84%	83%

* There were 296 missing respondents for the Child Age variable.

Notes:

N/A displayed for measures with fewer than 100 respondents.

Involving Teens in Their Care questions were only answered by respondents with children thirteen years of age or older.

Appendix A

Respondent and Child Demographic Characteristics

Appendix A

Respondent and Child Demographic Characteristics

Table A-1. 2023 Child HCAHPS Adult Respondent Demographic Characteristics

Respondent Demographic Characteristics	Number of Respondents	Percent of Respondents
Age		
18 - 24	239	4%
25 - 34	1,830	30%
35 - 44	2,574	42%
45 - 54	1,166	19%
55 - 64	211	3%
65 - 74	33	1%
75+	6	<1%
Total	6,059	100%
Missing	2,048	
Overall Total	8,107	
Education		
8th grade or less	219	4%
Some high school, but did not graduate	237	4%
High school graduate or GED	903	15%
Some college or 2-year degree	1,404	23%
4-year college graduate	1,542	25%
More than 4-year college degree	1,891	31%
Total	6,196	100%
Missing	1,911	
Overall Total	8,107	
Relationship to the Child		
Mother	5,665	87%
Father	759	12%
Grandmother	51	1%
Grandfather	3	<1%
Other Relative or Legal Guardian	48	1%
Someone else	14	<1%
Total	6,540	100%
Missing	1,567	
Overall Total	8,107	
Preferred Language		
English	5,282	85%
Spanish	759	12%
Chinese	61	1%
Vietnamese	16	<1%
Korean	9	<1%
Russian	9	<1%
Other Language	91	1%
Total	6,227	100%
Missing	1,880	
Overall Total	8,107	

Table A-2. 2023 Child HCAHPS Child Demographic Characteristics

Child Demographic Characteristics	Number of Respondents	Percent of Respondents
Child's Gender		
Male	4,312	53%
Female	3,794	47%
Total	8,106	100%
Missing	1	
Overall Total	8,107	
Child's Age		
Less than 1 year	2,160	28%
1 - 3 years	1,500	19%
4 - 6 years	842	11%
7- 12 years	1,322	17%
13+ years	1,987	25%
Total	7,811	100%
Missing	296	
Overall Total	8,107	
Child's Hispanic/Latino origin		
Yes, Hispanic or Latino	2,010	32%
No, not Hispanic or Latino	4,205	68%
Total	6,215	100%
Missing	1,892	
Overall Total	8,107	
Child's Race		
White	3,576	61%
African-American	581	10%
Asian	634	11%
Native Hawaiian/Pacific Islander	44	1%
American Indian/Native Alaskan	59	1%
Other	273	5%
Multi-racial	730	12%
Total	5,897	100%
Missing	2,210	
Overall Total	8,107	
Child's Health Status		
Excellent	2,329	37%
Very Good	2,069	33%
Good	1,234	20%
Fair	507	8%
Poor	127	2%
Total	6,266	100%
Missing	1,841	
Overall Total	8,107	

Appendix B

Definition of Composite Measures,
Items, and Ratings

Appendix B

Definition of Composite Measures, Items, and Ratings

The following tables present the composite measures, individual items, and the rating and willingness to recommend items for the Child HCAHPS Survey.

Table B-1. Communication with Parent	
Child HCAHPS Survey Question Text	Response Options
Measures	
Communication Between You and Your Child’s Nurses Composite Measure	
During this hospital stay, how often did your child’s nurses listen carefully to you? (Q14)	<ul style="list-style-type: none"> • Never • Sometimes • Usually • Always
During this hospital stay, how often did your child’s nurses explain things to you in a way that was easy to understand? (Q15)	
During this hospital stay, how often did your child’s nurses treat you with courtesy and respect? (Q16)	
Communication Between You and Your Child’s Doctors Composite Measure	
During this hospital stay, how often did your child’s doctors listen carefully to you? (Q17)	<ul style="list-style-type: none"> • Never • Sometimes • Usually • Always
During this hospital stay, how often did your child’s doctors explain things to you in a way that was easy to understand? (Q18)	
During this hospital stay, how often did your child’s doctors treat you with courtesy and respect? (Q19)	
Communication About Your Child’s Medicines Composite Measure	
During the first day of this hospital stay, were you asked to list or review all of the prescription medicines your child was taking at home? (Q5)	<ul style="list-style-type: none"> • Yes, definitely • Yes, somewhat • No
During the first day of this hospital stay, were you asked to list or review all of the vitamins, herbal medicines, and over-the-counter medicines your child was taking at home? (Q6)	
Before your child left the hospital, did a provider or hospital pharmacist explain in a way that was easy to understand how your child should take these new medicines after leaving the hospital? (Q39)	
Before your child left the hospital, did a provider or hospital pharmacist explain in a way that was easy to understand about possible side effects of these new medicines? (Q40)	
Keeping You Informed About Your Child’s Care Composite Measure	
During this hospital stay, how often did providers keep you informed about what was being done for your child? (Q23)	<ul style="list-style-type: none"> • Never • Sometimes • Usually • Always
How often did providers give you as much information as you wanted about the results of these tests? (Q25)	
Preparing You and Your Child to Leave the Hospital Composite Measure	
Before your child left the hospital, did a provider ask you if you had any concerns about whether your child was ready to leave? (Q36)	<ul style="list-style-type: none"> • Yes, definitely • Yes, somewhat • No
Before your child left the hospital, did a provider talk with you as much as you wanted about how to care for your child’s health after leaving the hospital? (Q37)	

Table B-1. Communication with Parent (cont'd)	
Child HCAHPS Survey Question Text	Response Options
Measures (cont'd)	
Preparing You and Your Child to Leave the Hospital Composite Measure (cont'd)	
A child's regular activities can include things like eating, bathing, going to school, or playing sports. Before your child left the hospital, did a provider explain in a way that was easy to understand when your child could return to his or her regular activities? (Q41)	<ul style="list-style-type: none"> • Yes, definitely • Yes, somewhat • No
Before your child left the hospital, did a provider explain in a way that was easy to understand what symptoms or health problems to look out for after your child left the hospital? (Q42)	
Before your child left the hospital, did you get information in writing about what symptoms or health problems to look out for after your child left the hospital? (Q43)	
Privacy When Talking With Doctors, Nurses, and Other Providers Single-Item Measure	
During this hospital stay, how often were you given as much privacy as you wanted when discussing your child's care with providers? (Q20)	<ul style="list-style-type: none"> • Never • Sometimes • Usually • Always
Keeping You Informed About Your Child's Care in the ER Single-Item Measure	
While your child was in this hospital's Emergency Room, were you kept informed about what was being done for your child? (Q4)	<ul style="list-style-type: none"> • Yes, definitely • Yes, somewhat • No

Table B-2. Communication with Child	
Child HCAHPS Survey Question Text	Response Options
Measures	
How Well Nurses Communicate With Your Child Composite Measure	
During this hospital stay, how often did your child's nurses listen carefully to your child? (Q8)	<ul style="list-style-type: none"> • Never • Sometimes • Usually • Always
During this hospital stay, how often did your child's nurses explain things in a way that was easy for your child to understand? (Q9)	
During this hospital stay, how often did your child's nurses encourage your child to ask questions? (Q10)	
How Well Doctors Communicate With your Child Composite Measure	
During this hospital stay, how often did your child's doctors listen carefully to your child? (Q11)	<ul style="list-style-type: none"> • Never • Sometimes • Usually • Always
During this hospital stay, how often did your child's doctors explain things in a way that was easy for your child to understand? (Q12)	
During this hospital stay, how often did your child's doctors encourage your child to ask questions? (Q13)	
Involving Teens in Their Care Composite Measure	
During this hospital stay, how often did providers involve your child in discussions about his or her healthcare? (Q45)	<ul style="list-style-type: none"> • Never • Sometimes • Usually • Always

Table B-2. Communication with Child (cont'd)	
Child HCAHPS Survey Question Text	Response Options
Measures (cont'd)	
Involving Teens in Their Care Composite Measure (cont'd)	
Before your child left the hospital, did a provider ask your child if he or she had any concerns about whether he or she was ready to leave? (Q46)	<ul style="list-style-type: none"> • Yes, definitely • Yes, somewhat
Before your child left the hospital, did a provider talk with your child about how to take care of his or her health after leaving the hospital? (Q47)	<ul style="list-style-type: none"> • No

Table B-3. Attention to Safety and Comfort	
Child HCAHPS Survey Question Text	Response Options
Measures	
Preventing Mistakes and Helping You Report Concerns Composite Measure	
Before giving your child any medicine, how often did providers or other hospital staff check your child's wristband or confirm his or her identity in some other way? (Q29)	<ul style="list-style-type: none"> • Never • Sometimes • Usually • Always
Mistakes in your child's healthcare can include things like giving the wrong medicine or doing the wrong surgery. During this hospital stay, did providers or other hospital staff tell you how to report if you had any concerns about mistakes in your child's healthcare? (Q30)	<ul style="list-style-type: none"> • Yes, definitely • Yes, somewhat • No
Helping Your Child Feel Comfortable Composite Measure	
Things that a family might know best about a child include how the child usually acts, what makes the child comfortable, and how to calm the child's fears. During this hospital stay, did providers ask you about these types of things? (Q21)	<ul style="list-style-type: none"> • Yes, definitely • Yes, somewhat • No
Hospitals can have things like toys, books, mobiles, and games for children from newborns to teenagers. During this hospital stay, did the hospital have things available for your child that were right for your child's age? (Q35)	
During this hospital stay, how often did providers talk with and act toward your child in a way that was right for your child's age? (Q22)	<ul style="list-style-type: none"> • Never • Sometimes • Usually • Always
Responsiveness to the Call Button Single-Item Measure	
After pressing the call button, how often was help given as soon as you or your child wanted it? (Q27)	<ul style="list-style-type: none"> • Never • Sometimes • Usually • Always
Paying Attention to Your Child's Pain Single-Item Measure	
During this hospital stay, did providers or other hospital staff ask about your child's pain as often as your child needed? (Q32)	<ul style="list-style-type: none"> • Yes, definitely • Yes, somewhat • No

Table B-4. Hospital Environment	
Child HCAHPS Survey Question Text	Response Options
Measures	
Cleanliness of Hospital Room Single-Item Measure	
During this hospital stay, how often were your child’s room and bathroom kept clean? (Q33)	<ul style="list-style-type: none"> • Never • Sometimes • Usually • Always
Quietness of Hospital Room Single-Item Measure	
During this hospital stay, how often was the area around your child’s room quiet at night? (Q34)	<ul style="list-style-type: none"> • Never • Sometimes • Usually • Always

Table B-5. Global Ratings	
Child HCAHPS Survey Question Text	Response Options
Measures	
Overall Rating of Hospital Single-Item Measure	
Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your child’s stay? (Q48)	<ul style="list-style-type: none"> • 0-10
Willingness to Recommend the Hospital Single-Item Measure	
Would you recommend this hospital to your friends and family? (Q49)	<ul style="list-style-type: none"> • Definitely no • Probably no • Probably yes • Definitely yes

Appendix C

How Results are Calculated

Appendix C

How Results are Calculated

This appendix provides an overview of how the results are calculated.

Survey Inclusion Rules for the Database

Both complete and partially complete records are included in the Child HCAHPS Survey Database. A complete record has response to 50 percent or more of the key question items and a response for one or more composite measures or rating items. A partially complete record has responses for one or more core composite measures or rating items but less than 50 percent of the key question items. A list of the key question items can be found in the [Fielding the CAHPS Child Hospital Survey](#) guidelines.

Level of Results

Child HCAHPS Survey Database results are calculated at the respondent level only. A respondent is defined as an individual who has completed or partially completed a Child HCAHPS Survey. Respondent-level survey results are calculated across all respondents in the Database, ignoring their association with a particular hospital or inpatient pediatric department.

Types of Results: Top Box and Proportional Scores

Top box scores for survey items are created by calculating the percentage of respondents who chose the most positive response on a given item’s response scale (e.g., “Always” on the “Always-Never” scale). The Child HCAHPS Survey uses several different response scales. Table C-1 displays the different response scales and how the options are categorized for top box and proportional scoring.

Response Scale	Bottom Box Score: Least Positive Responses	Middle Box Score: Middle Responses	Top Box Score: Most Positive Responses
3-point Yes, No	No	Yes, somewhat	Yes, definitely
4-point response scale	Never, Sometimes	Usually	Always
Global rating	0-6	7-8	9-10
Willingness to recommend	Definitely no, Probably no	Probably yes	Definitely yes

Calculating top box and other proportional scores for an individual survey item: Top box, middle box, and bottom box scores are calculated by aggregating results across all respondents in the Database. For example, if 400 out of 1,000 total respondents answered “Always” to a particular item, the top box score for that item would be 40 percent [i.e., $(400/1,000) \times 100 = 40\%$].

Calculating top box and other proportional scores for a composite measure: The scores for a composite measure are equal to the average or mean of the proportion of responses (excluding missing data) in each response category across the items in the composite. The following steps show how those proportions are calculated:

- Step 1 – Calculate the proportion of responses in each proportional score category for each question in a composite measure.
- Step 2 – Calculate the average proportion responding to each category across the questions in the composite measure.

As shown in Table C-2, top box scores for composite measures are calculated by averaging the top box scores across the items within the composite measure. This methodology can be applied to any of the Child HCAHPS composite measures. For example, the “Communication Between You and Your Child’s Doctors” composite measure has three items. If the top box score for the first item is 68 percent, the second item is 72 percent, and the third item is 70 percent the composite measure score would be 70 percent (i.e., $[68 \text{ percent} + 72 \text{ percent} + 70 \text{ percent}] \div 3 = 70 \text{ percent}$). The same method is used for the other proportional scores.

Items in Composite Measure	Response Scale	Bottom Box Score (Never or Sometimes)	Middle Box Score (Usually)	Top Box Score (Always)
Doctors listened carefully to parent	Never, Sometimes, Usually, Always	12%	20%	68%
Doctors explained things to parent in a way that was easy to understand		7%	21%	72%
Doctors treated parent with courtesy and respect		15%	19%	66%
Composite Measure Proportional Score	--	11% = $(12\% + 7\% + 15\%) / 3$	20% = $(20\% + 21\% + 19\%) / 3$	69% = $(68\% + 72\% + 66\%) / 3$

As shown in this example, each item is given equal weight when calculating the composite measure results. Computationally, this implies calculating the score of each item and then finding the average across the item scores to obtain the composite measure score. The items are weighted equally because there is no evidence to suggest that any item is more important than another.

In the Child HCAHPS Survey, there are composite measures that have items on two different response scales (“Involving Teens in Their Care” and “Preventing Mistakes and Helping You Report Concerns”). Table C-3 shows how scores for these items can be combined to create proportional scores.

Table C-3. Sample Calculation of Top Box and Proportional Scores for Child HCAHPS Measures				
Items in Composite Measure	Response Scale	Bottom Box Score (Never, Sometimes or No)	Middle Box Score (Usually or Yes, Somewhat)	Top Box Score (Always or Yes, definitely)
Doctors listened carefully to parent	Never Sometimes Usually Always	10%	25%	65%
Doctors explained things to parent in a way that was easy to understand	Yes, definitely Yes, somewhat No	5%	40%	55%
Doctors treated parent with courtesy and respect	Yes, definitely Yes, somewhat No	15%	10%	75%
Composite Measure Proportional Score	--	10% = (10% + 5% + 15%) / 3	25% = (25% + 40% + 10%) / 3	65% = (65% + 55% + 75%) / 3

Data Suppression Rules

There are circumstances under which certain item or composite measure scores or reporting categories are suppressed (i.e., 'NA' is displayed). There are also times when certain hospitals are excluded from calculations. These instances of data suppression and/or exclusion are due to one or more of the following factors:

The rules for data suppression and exclusion are described below.

1. Item Suppression

If there are fewer than 100 valid responses available for any item, the item's results are suppressed.

2. Reporting Category Suppression

If there are fewer than two hospitals and fewer than 100 valid responses in a given characteristic (e.g., child age), we do not show results for the characteristic.



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